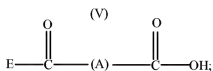
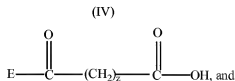
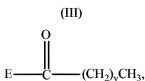
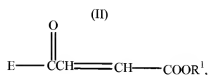
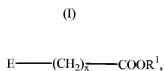


IN THE CLAIMS:

1. (Originally presented) A nanocomposite comprising clay and an elastomer comprising C₂ to C₁₀ olefin derived units; wherein the elastomer also comprises functionalized monomer units described by the following groups (I), (II), (III), (IV) and (V) pendant to the elastomer, E:



wherein R¹ is selected from hydrogen, C₁ to C₂₀ alkyls, alkenyls or aryls, substituted C₁ to C₂₀ alkyls, alkenyls or aryls; wherein the value of x ranges from 0 to 20, preferably from 1 to 10, and more preferably from 1 to 5; and wherein the value of y ranged from 0 to 20, preferably from 0 to 10; and wherein the value of z ranges from 1 to 20, preferably from 1 to 10, and more preferably from 1 to 5; and wherein "A" is an aryl group, either substituted or not.

2. (Originally presented) The nanocomposite of Claim 1, wherein the elastomer also comprises monomer units selected from styrenic derived units and substituted styrenic derived units.

3. (Originally presented) The nanocomposite of Claim 2, wherein the styrenic units are functionalized.
4. (Cancelled)
5. (Originally presented) The nanocomposite of Claim 1, wherein the olefin is selected from one or more of isobutylene, isobutene, isoprene, cyclopentadiene, 2-methyl-1-butene, 3-methyl-1-butene, 2-methyl-2-butene, and 4-methyl-1-pentene, ethylene, propene, 1-butene, 1-hexene, and 1-octene.
6. - 8. (Cancelled)
9. (Originally presented) The nanocomposite of Claim 1, wherein the elastomer also comprises multiolefin derived units.
10. (Originally presented) The nanocomposite of Claim 1, wherein the elastomer is selected from any one or a mixture of natural rubber, poly(isobutylene-*co*-isoprene), polybutadiene, poly(styrene-*co*-butadiene) rubber, poly(isoprene-*co*-butadiene), poly(styrene-isoprene-butadiene), star-branched polyisobutylene rubber, poly(isobutylene-*co*-*p*-methylstyrene), ethylene-propylene-alkylstyrene rubber, ethylene-propylene-styrene rubber.
11. (Originally presented) The nanocomposite of Claim 1, wherein the functionalized units are present on the elastomer from 0.01 wt% to 15 wt% of the elastomer.
12. (Originally presented) The nanocomposite of Claim 1, wherein the clay has been treated with an exfoliating agent to form an exfoliated clay.
13. (Cancelled)

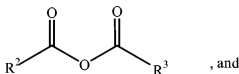
14. (Originally presented) The nanocomposite of Claim 1, wherein the clay is present from 0.1 wt% to 50 wt% of the nanocomposite.
15. (Cancelled)
16. (Originally presented) The nanocomposite of Claim 1, also comprising a filler selected from carbon black, modified carbon black, silica, precipitated silica, and blends thereof.
17. – 18. (Cancelled)
19. (Originally presented) The nanocomposite of Claim 1, also comprising a secondary rubber selected from natural rubber, polybutadiene rubber, nitrile rubber, silicon rubber, polyisoprene rubber, poly(styrene-*co*-butadiene) rubber, poly(isoprene-*co*-butadiene) rubber, styrene-isoprene-butadiene rubber, ethylene-propylene rubber, brominated butyl rubber, chlorinated butyl rubber, halogenated isoprene, halogenated isobutylene copolymers, polychloroprene, star-branched polyisobutylene rubber, star-branched brominated butyl rubber, poly(isobutylene-*co*-isoprene) rubber; halogenated poly(isobutylene-*co*-*p*-methylstyrene), ethylene-propylene rubber and mixtures thereof.
20. (Currently amended) An article ~~A tire innerliner~~ comprising the nanocomposite of Claim 1, ~~the article being a tire innerliner or an innertube.~~
21. (Cancelled)
22. (Originally presented) A method of forming a nanocomposite comprising contacting clay, an elastomer, an grafting promoter, and at least one

functionalizing compound, wherein the elastomer comprises C₂ to C₁₀ olefin derived units.

23. (Currently amended) The method of Claim 22, wherein the method of contacting comprises one of the following methods: 1) the elastomer is first contacted with the functionalizing compound, followed by contacting with the clay, 2) the elastomer, clay, and acid functionalizing compound are contacted simultaneously, and 3) the elastomer and functionalizing compound are melt blended.

24. - 27. (Cancelled)

28. (Originally presented) The method of Claim 22, wherein the functionalizing compound is selected from CO₂ and the following:



wherein R² and R³ are the same or different and are selected from hydrogen, C₁ to C₁₀ alkyls, alkenyls and aryls, hydroxyl, and C₁ to C₁₀ alkoxys, wherein R² and R³ may form a ring structure; and wherein X is selected from hydroxyl, halides, preferably bromine and chlorine, and alkoxy groups.

29. (Originally presented) The method of Claim 22, wherein the functionalizing compound is selected from succinic anhydride, maleic

anhydride, phthalic anhydride, glutaric anhydride citraconic anhydride, itaconic anhydride, and other cyclic anhydrides, succinyl chloride, glutaryl chloride, itaconyl chloride, malonyl chloride, adipoyl chloride, diethylmalonyl dichloride, 3-methyladipoyl chloride, pimeloyl chloride, suberoyl chloride, azelaoyl chloride, sebacoyl chloride, isophthaloyl dichloride, phthaloyldichloride, terephthaoyl chloride.

30. (Originally presented) The method of Claim 22, wherein the elastomer also comprises monomer units selected from styrenic derived units and substituted styrenic derived units.
31. (Originally presented) The method of Claim 22, wherein the olefin is selected from one or more of isobutylene, isobutene, isoprene, cyclopentadiene, 2-methyl-1-butene, 3-methyl-1-butene, 2-methyl-2-butene, and 4-methyl-1-pentene, ethylene, propene, 1-butene, 1-hexene, and 1-octene.
32. (Originally presented) The method of Claim 30, wherein the styrene derived units are present from 1 to 15 wt% of the elastomer.
33. – 35. (Cancelled)
36. (Originally presented) The method of Claim 22, wherein the elastomer is selected from any one or a mixture of natural rubber, poly(isobutylene-*co*-isoprene), polybutadiene, poly(styrene-*co*-butadiene) rubber, poly(isoprene-*co*-butadiene), poly(styrene-isoprene-butadiene), star-branched polyisobutylene rubber, poly(isobutylene-*co-p*-methylstyrene), ethylene-propylene-alkylstyrene rubber, ethylene-propylene-styrene rubber.
37. (Originally presented) The method of Claim 22, wherein the elastomer is functionalized by contacting with the functionalizing compound, wherein

the functional groups are present on the elastomer from 0.01 wt% to 15 wt% of the elastomer.

- 38. (Originally presented) The method of Claim 22, wherein the clay has been treated with an exfoliating agent to form an exfoliated clay.
- 39. (Cancelled)
- 40. (Originally presented) The method of Claim 22, wherein the clay is present from 0.1 wt% to 50 wt% of the nanocomposite.
- 41. (Cancelled)
- 42. (Originally presented) The method of Claim 22, also comprising a filler selected from carbon black, modified carbon black, silica, precipitated silica, and blends thereof.
- 43. - 44. (Cancelled)
- 45. (Originally presented) The method of Claim 22, also comprising a secondary rubber selected from natural rubber, polybutadiene rubber, nitrile rubber, silicon rubber, polyisoprene rubber, poly(styrene-*co*-butadiene) rubber, poly(isoprene-*co*-butadiene) rubber, styrene-isoprene-butadiene rubber, ethylene-propylene rubber, brominated butyl rubber, chlorinated butyl rubber, halogenated isoprene, halogenated isobutylene copolymers, polychloroprene, star-branched polyisobutylene rubber, star-branched brominated butyl rubber, poly(isobutylene-*co*-isoprene) rubber; halogenated poly(isobutylene-*co*-*p*-methylstyrene), ethylene-propylene rubber and mixtures thereof.
- 46. - 72. (Cancelled)